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SOUTHWEST ARKANSAS' SMALL WOODLAND OWNERS

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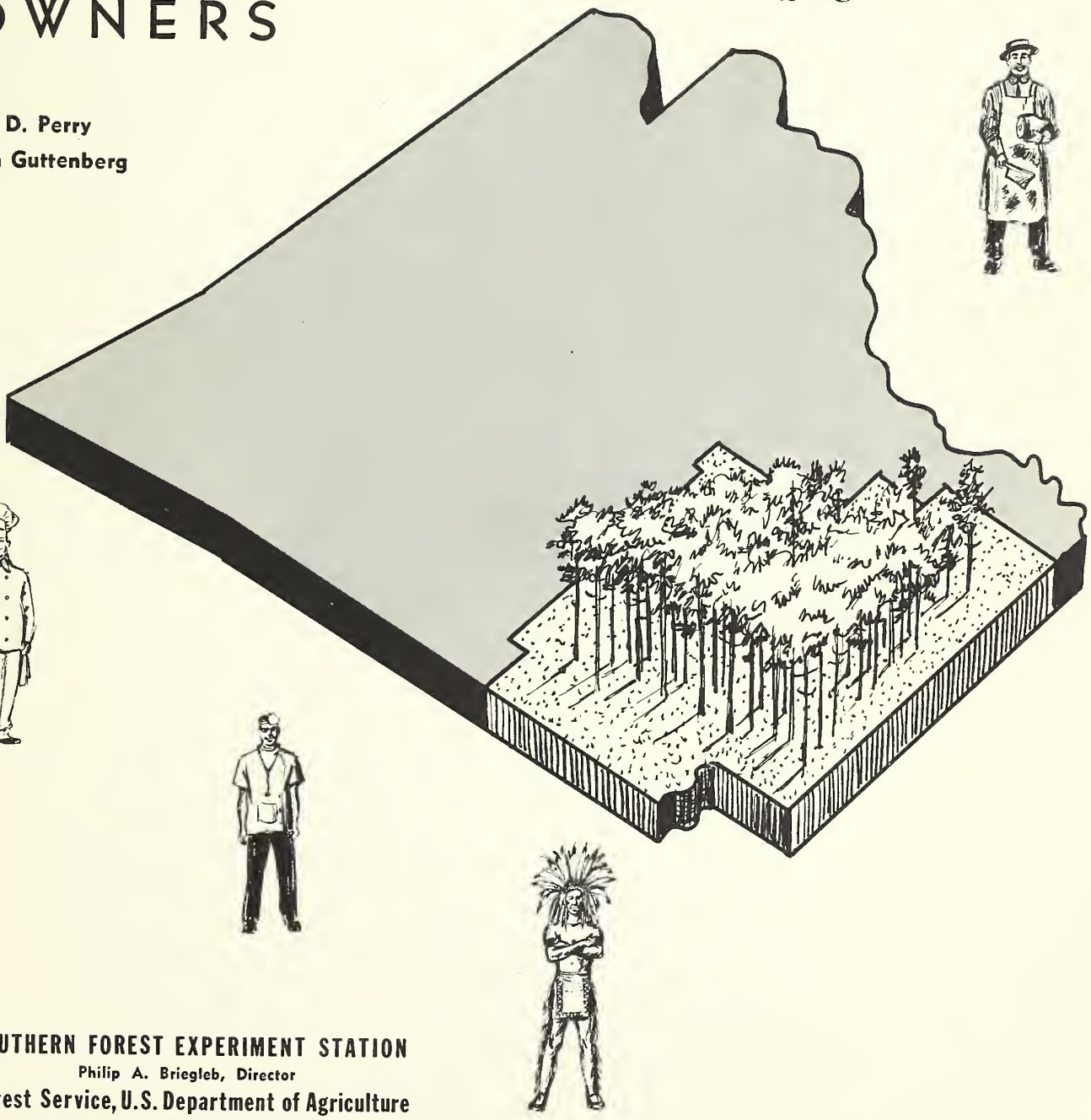

SOUTHERN FOREST EXPERIMENT STATION
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In Brief

Seventy-eight percent of southwest Arkansas' 8.9 million acres is timberland.

About 3.4 million wooded acres are in tracts of less than 5,000 acres in size, held by 55,000 owners. The average holding is 62 acres.

The individuals who tend to invest in forestry have above-average assets. Instead of contributing their own time, they typically hire labor for forest operations.

Active managers make up less than 10 percent of the owners but hold one-third of the acreage.

Planting open areas to pine and removing undesirable trees are the most popular practices. Sixty percent of those who plant and 84 percent of those who control weed trees receive government payments.

An estimated 7,000 owners in possession of over half a million acres are interested in leasing their tracts to obtain full professional management—a promising approach.

Public and private forestry agencies have stimulated good intentions among two-thirds of the region's landowners. Community leaders are confident that a sizable share of these intentions are ready to be converted to practice.

Agencies wishing to stimulate management on small holdings will probably accomplish most by first concentrating their resources on tracts of more than 99 acres.

Contents

Acknowledgment

Much assistance in the field work of this study was received from John R. Henry and Edmond I. Swensen of the Southern Region, U. S. Forest Service, and William C. Siegel of the Southern Forest Experiment Station.

Southwest Arkansas' Small Woodland Owners

Joe D. Perry and Sam Guttenberg

Southern Forest Experiment Station

Southwest Arkansas is timber country. Seventy-eight percent of the 8.9 million acres in the 20-county region (fig. 1) is forested, and timber-connected industries provide much of the region's employment. Pulp mills in and on the periphery of the area have been expanding, new ones have been built, and more are planned. Some of the South's most modern sawmills have been constructed here. In part, these developments are based on prospects for the larger timber business implicit in a rising gross national product and expanding population.

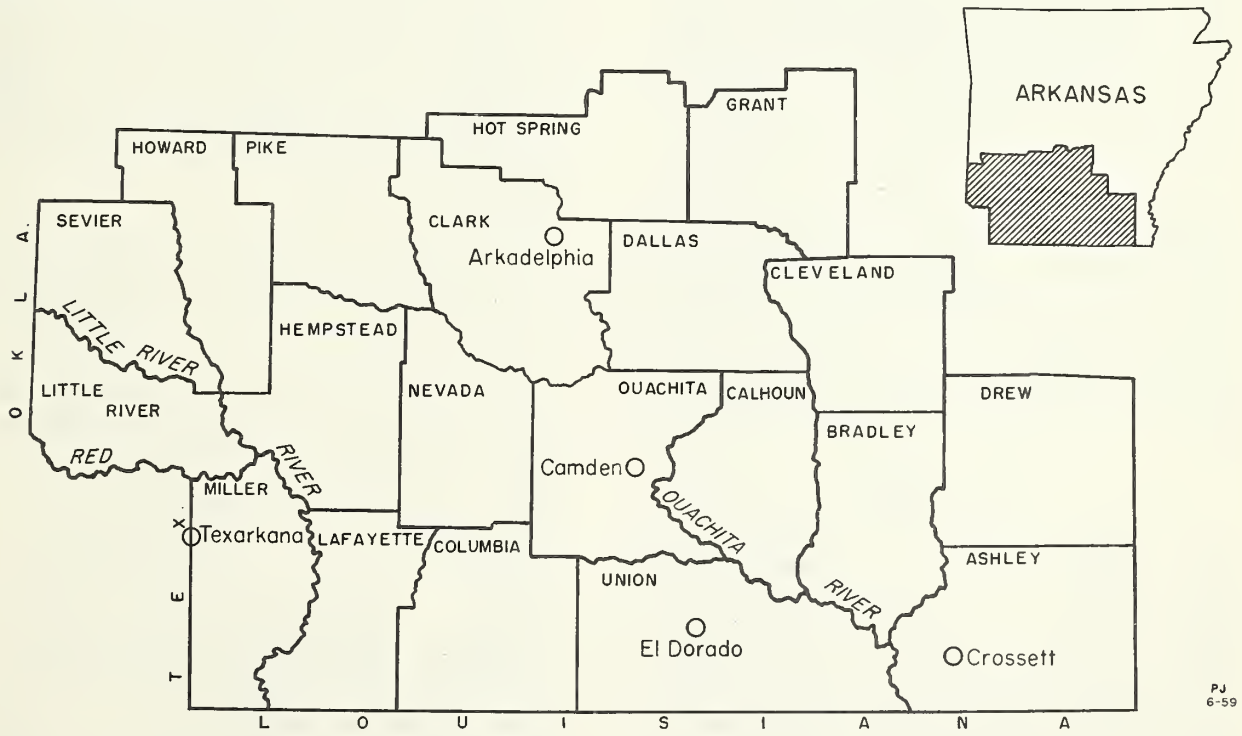
The eventual size of the forest industry, its stability, and its capacity to provide rewarding employment will be affected by the level of management applied to the region's timberlands. About 3 million acres are held by wood-using industries. These holdings are above the average in current stocking and are being managed for continuous and expanding timber production. Even so, much of the timber to supply the mills will continue to come from the area's small tracts—holdings of less than 5,000 acres, 3.4 million acres in all.

This report is based on a 1958 study of the area's 55,000 small forest owners. Among other things, the object was to determine what the owners are like, how much they own, what they are doing about their timber-growing prospects, and what their needs are.

A CHANGING ECONOMY

Southwest Arkansas is an exporter of people. Between 1940 and 1954 population declined 9 percent, to 387,000. Rural population, how-

Figure 1. *Study area.*



ever, decreased 21 percent; this decline carries implications of an improved ratio of resources to people. Migration has occurred in all age groups, but chiefly among the young workers.

The changing population has been associated with farm abandonment and widespread conversion of farmsteads to rural residences. Those still farming have been acquiring additional acreage. Average farm size increased from 85 acres in 1945 to 116 acres in 1954. In the same period, woodland acreage went from 32 to 52 acres per farm (or, if farms with no woodlands are excluded, from 53 to 75 acres). Still in the same time span, the proportion of farmers working 100 days or more per annum in off-the- farm jobs jumped from 24 to 40 percent. The 1954 census estimated that 51 percent of the region's farmers earned more from off-farm activities than from farming. The agricultural revolution and prospects for further industrial expansion suggest that, definitional changes aside, there will be further gains in farm size and further declines in the rural population.

These trends are having a favorable effect on forest acreage. For the region as a whole, woodland acreage increased 6 percent between 1936 and 1949 and 10 percent between 1949 and 1958. Farming is being progressively confined to the better croplands. Cattle production, which requires less manpower than field crops, is on the increase. In the short period 1950-54, cattle numbers rose from 250,000 to 374,000—this despite a severe drought. In some places, pasture programs are competing with timber growing for use of the land. But various government programs designed to restrict basic crop production have materially aided reforestation in the past few years. The fact that farmers are now specifically included in the Social Security program should ease the pressure to cut small-tract timber prematurely.

THE STUDY

The basis for sampling was the existing Forest Survey grid of points spaced 3 miles apart in cardinal directions and superimposed on aerial photographs. Points 6 miles apart, 392 in the entire region, were examined on aerial photographs to determine their land-use status. Non-forested points were excluded. In effect, the sample was drawn strictly in proportion to forest acreage. The 392 sample points were plotted on county highway maps that showed section, range, and township lines. These maps made it possible to obtain each landowner's name, address, and acreage from county tax records. Frequently the tax assessors and other informed public officials provided additional information.

Any forested point that was found to be on a holding of less than 3 or more than 4,999 acres was excluded from the sample, as were points on public lands. By these criteria, the 392 forested points netted 149 tracts held by 147 small woodland owners.

Though indirect sources provided some information on all 147 owners, diligent efforts were made to contact and personally interview each. The questionnaire for these interviews (see p. 12) was a consolidation of those used in prior ownership studies (5)[1]. As is usual in personal-interview research, there was a varying degree of response. Difficulties also stemmed from the large proportion of absentee owners: only 40 respondents resided on their holdings. Thirty-two respondents lived outside the 20-county area, but distance did not prevent interviewing some respondents as far off as Nashville, Tennessee. When an owner could not be interviewed, his legal representative or someone commissioned to look after the land was contacted instead. As a last resort, a combination of mail contact and telephone interview was used; this approach accounted for 7 of the 147 respondents. Eight owners could not be interviewed at all.

The forested acreage surrounding each qualifying sample point was examined, the number of locations inspected being determined by the size of the tract (table 1). A wedge prism of 3.03 diopters (basal area factor of 10) was used to pick trees to be tallied. Information was taken on species group, tree size, tree class, stocking, and degree of grazing.

Table 1. *Sampling intensity by tract size*

Tract size (acres)	Locations inspected
3 to 9	1 per 2 acres
10 to 99	6 plus 1 for each 10 acres above 10
100 to 499	14 plus 1 for each 20 acres above 100
500 to 4,999	34 plus 1 for each 200 acres above 500

Each of the net sample points represented 23,040 forested acres. When the 23,040 acres was divided by the total regional forest acreage

[1] Bold-face numbers in parentheses refer to Literature Cited, p. 11.

held by the owner on whose tract the sample point fell, the quotient was regarded as representing the number of similar ownerships in the region. Performing this operation for each sample point and summing the quotients provided regional estimates of small woodland owners by category. The most accurate estimates are for total acreage and all owners. Subdividing the data necessarily leads to larger errors of estimate.

THE OWNERS IN BRIEF

The survey disclosed 55,000 small private ownerships in the study area, the total holdings being some 3.4 million forest acres and the average individual holding 62 acres. Table 2 shows that the smallest size class (3-29 acres) includes 52 percent of the owners but only 11 percent of the timberland. The 2 largest size classes, with less than 2 percent of the owners, contain 29 percent of the acreage. Forty-four percent of the respondents own more than one tract within the region, while 11 respondents own 4,470 acres outside.

Table 2. *Small-tract landowners and forest area, by size class, in southwest Arkansas*

Total forest holdings (acres)	Owners	Forest area
	Number	Acres
3-29	28,700	369,000
30-99	19,200	991,000
100-499	6,300	1,083,000
500-2,499	900	783,000
2,500-4,999	100	207,000
Total	55,200	3,433,000

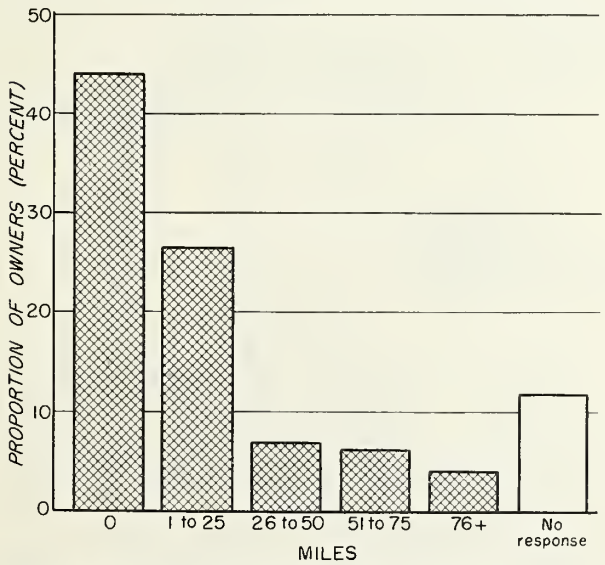


Figure 2. *Distance from owners' residences to their tracts.*

As has been implied, ownership and residence do not necessarily go hand in hand. Only 44 percent of the region's owners reside on their tracts (fig. 2). Seventy percent live within 25 miles of their properties. The average distance from tract to residence is 18 miles, the median 1 mile. Because distance is usually considered a handicap in forest management, it is of interest to note that owners residing more than 75 miles from their tracts have only 1/4 million acres.

What about owners' ages? Nearly half are over 50 years old (fig. 3). Youths are notably scarce; only 4 respondents were less than 31 years of age. The fact that more than 47 percent are over 50 may portend problems for sustained forest-management programs.

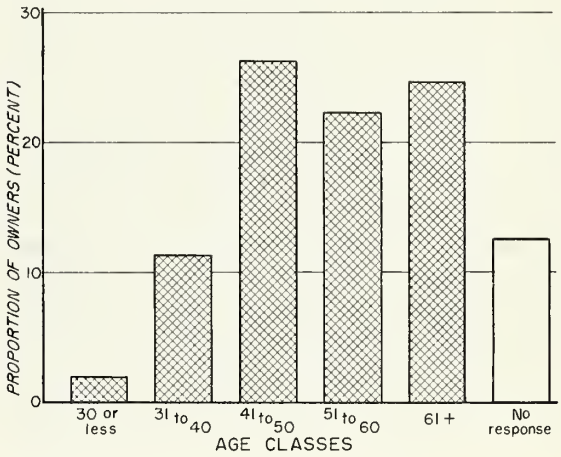


Figure 3. *Landowners by age class.*

The legal forms of ownership and methods by which titles are transferred also favor or hamper timber management. Titles were initially read from the tax records and then verified with the owners. Two-thirds of the tracts are held by individuals (fig. 4). Partnerships are fairly numerous. They commonly are family affairs—husband-wife or father-son. Other partnership arrangements are generally lacking because of the associated financial liability.

Some 2,500 estates control 1/3 million acres. Heirs of half the estates are unable to agree on a definite course of property management. Respondents wishing to manage estate timber bear the burden of winning acceptance for their policies, while needy heirs have an insatiable appetite for liquidation and the sentimental will not agree to any act which would change the "old home place."

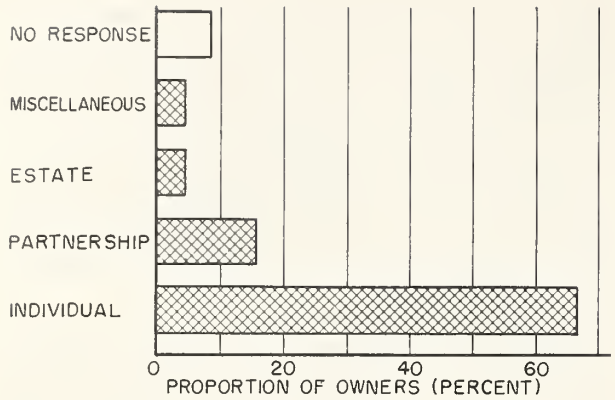


Figure 4. *Legal form of ownership.*

The information on tenure reflects both the regional population changes and the generally aged forest owners. As used here, tenure refers to the number of years the particular tract surrounding the sample point has been in the owner's possession. One-fourth of the owners acquired their tracts in the past 5 years (fig. 5). This rather large turnover in real estate is at least partly related to the decline in the rural population. Those remaining on farmsteads or in the nearby towns have been adding to their land-holdings. Because the average owner is 54 years old, however, it is not surprising to find that almost half of the tracts have been held more than 15 years—time enough to grow a first cut of pine pulpwood.

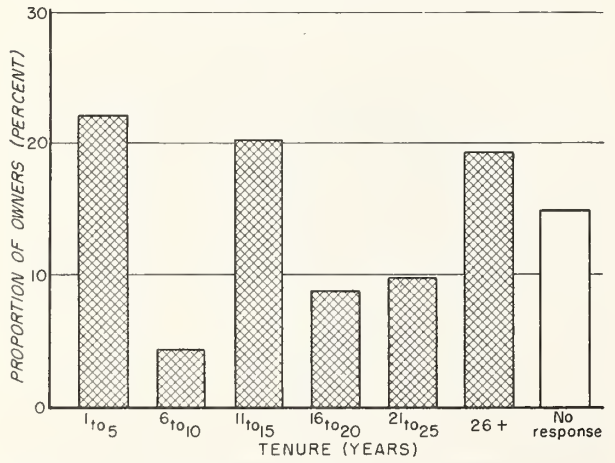


Figure 5. *Ownerships by length of tenure.*

At face value, the tenure statistics are somewhat misleading, because they disregard the means by which the land was acquired. Three-tenths of the tracts were inherited (fig. 6). The family tenure of many inherited lands is measured in decades rather than years—one case going back 60 years. Gifts of land are an alternative form of inheritance that may become more popular, for tax considerations make it desirable for an owner to give assets away prior to his death. Purchase, however, is the most common form of acquisition, accounting for over 50 percent of the title transfers.

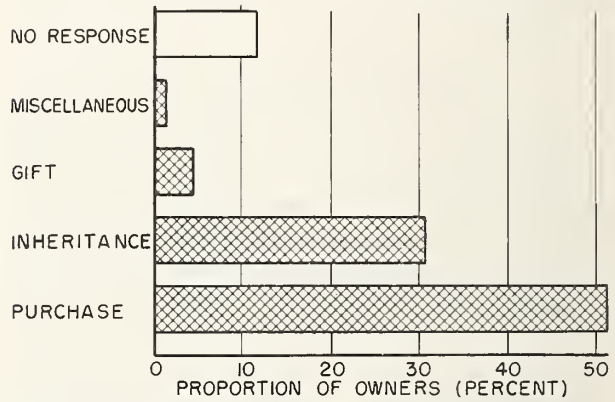


Figure 6. *Ownerships by method of acquisition.*

The large number of tracts acquired recently, and typically by purchase, appears associated with timber sales activity. Over half the owners have sold timber at least once. About one-fourth have had sales in the past 5 years (table 3). Moderately stocked pine tracts in this province can support a cut every 5 years. Frequent cutting is especially desirable when there is opportunity to reduce mortality losses and improve species composition, tree quality, and spacing.

Table 3. *Period since last timber sale*

Years since last timber sale	Proportion of owners
	Percent
0-5	25.7
6-10	15.2
11-and longer	14.3
Haven't cut	32.1
Don't know	.7
No response	12.0
Total	100.0

The active timber markets, widespread employment in timber-connected activities, and both public and private forestry promotion programs have affected owners' attitudes. When asked about intended use of their woodlands, two-thirds of the owners claimed to be primarily interested in growing timber (table 4).

Table 4. *Primary land-use intentions*

Present intention	Proportion of owners	Proportion of forest acreage
	Percent	Percent
Timber growing	65.2	69.8
Grazing	6.3	6.7
Residence	4.7	.7
Speculation	4.9	4.7
Other	6.9	10.0
No response	12.0	8.1
Total	100.0	100.0

In terms of intent, grazing is another aspect of land clearing for agriculture. With the advent of blooded stock for beef production, more rather than less forest land will be converted to pasture. As yet, only some 7 percent of small-tract acreage is involved. In terms of forest management, table 4 perhaps signifies more promise than substance. The achievement has largely been in getting people to acknowledge that timber growing is worth while. It takes time for intentions to be converted to practice. But the questionnaire and field examinations make it possible to assess the current forest management status.

MANAGERS VERSUS NON-MANAGERS

A management yardstick is needed. In this study, respondents were classed as managers if they had taken any one of a number of positive steps. These measures included planting, cull timber removal or timber stand improvement (TSI), fire protection, control of grazing, planned harvesting, and prescribed burning. This standard was adhered to: some purchasers of woodlands with firm management plans were classed as non-managers because they had not done anything as yet.

What distinguishes active managers from non-managers? Managers are somewhat younger, averaging 45 years of age as against 55 for non-managers. Ninety percent of the managers say they intend to grow timber, though so do 71 percent of the non-managers. That some owners have made an investment in forestry without claiming to be timber growers partly reflects the imprecision of interview studies. The greatest apparent difference is in assets.

The managers' holdings average 228 forested acres, in contrast with 46 for non-managers. The relationship between management and tract size appears in virtually all ownership studies, for, as Southern and Miller (4) have noted, "Foresters have found that the type and size of ownership of forested lands exert a major influence on how timber on such holdings is managed." There is at least a rough correlation between total assets and acreage owned—and considerable out-of-pocket investment is required to apply remedial measures to the depleted tracts that are the norm for small woodlands (2).

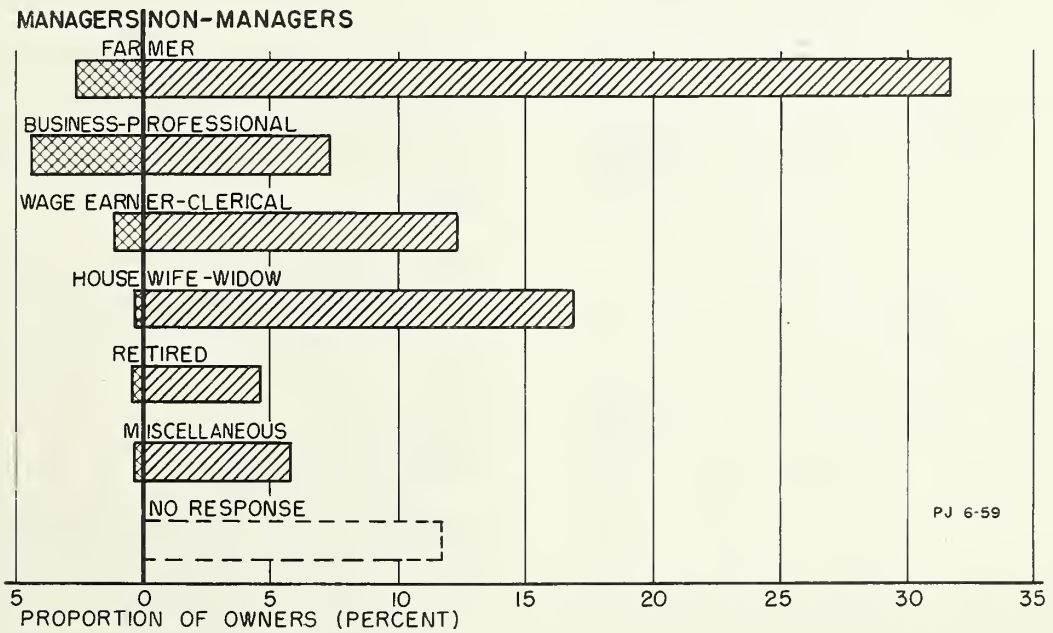


Figure 7. *Managers and non-managers, by occupation.*

The occupation class of the owners is another rough yardstick of assets. Investments in forestry have been made by a greater proportion of business and professional people than any other owner group (fig. 7). Farmers, long considered to be in the best position to practice forestry, do not show up well. The data in table 5 suggest the superior financial situation of business and professional people in this area. As the changing rural population implies, agriculture has not generally been a very rewarding occupation. In the better farming areas, the need for increased acreage and for equipment, seed, fertilizer, and other working capital probably takes most, if not all, of the funds available for investment.

Assets aside, the implication of table 5 that one-third of the forest land is being managed must be accepted with caution. The costs of the two most popular measures, tree planting and TSI, are largely recoverable. Thus, 84 percent of the landowners who had improved their stands and 60 percent of those who had planted received government payments for their efforts. Too, all planting stock was and is grown by the Arkansas Forestry Commission and sold at cost. In recent years forest industries have purchased 2,000,000 of these seedlings annually for free distribution to small-tract owners.

Programs that cover entire tracts are notably scarce. In effect, the overwhelming majority of the acreage still receives very little management. Professional skills are required to delineate the needs for regeneration, thinning, harvest cutting, and adjustments in species composition.

Table 5. *Distribution of small forest ownerships, by management status, owner occupation, and proportion of acreage held*

Owner occupation	Managers		Non-managers	
	Proportion of owners	Proportion of forest acreage	Proportion of owners	Proportion of forest acreage
	Percent	Percent	Percent	Percent
Farmer	2.7	7.4	31.7	18.8
Business-professional	4.3	16.1	7.4	10.7
Wage earner-clerical	1.1	2.0	12.5	9.4
Housewife-widow	.2	2.0	16.8	12.8
Retired	.4	3.3	4.7	3.3
Other	.4	2.7	5.8	3.4
No response	...	...	12.0	8.1
Total owners	9.1	...	90.9	...
Total acreage	...	33.5	...	66.5

Contacts by Professional Foresters

About 6,000 managers or non-managers have been contacted by foresters, and of this number 400 have utilized both public and private foresters. Of owners who sought or welcomed expert assistance, more than 50 percent were less than 41 years old, while those above 60 accounted for only 10 percent (table 6).

Table 6. *Owners contacted by professional foresters, by proportion of forester groups*[1]

Owner age class	Private foresters		Public forester	Both public and private
	Consulting	Industrial		
	Percent	Percent	Percent	Percent
40 and younger	...	38.3	13.3	1.6
41-50	(2)	6.7	13.3	1.7
51-60	(2)	3.3	10.0	1.7
61 and older	(2)	(2)	6.7	1.7
Total	1.7	48.3	43.3	6.7

[1] Information from 46 respondents representing 6,000 owners.
[2] Less than 1 percent.

Not all respondents were able to recall precisely what agency, act, or individual motivated them to take advantage of professional forestry services. To the extent possible, owners' reflections were allocated to the 5 categories listed in table 7. Demonstrations seem to have had the greatest effect. Among other things, influential demonstrations included tree-farm exhibits and the management activities of lumber and pulp companies. The annual field days of the Southern Forest Experiment Station's research center at Crossett, Arkansas, were also mentioned by respondents. Forestry literature was notably inferior as motivation while contacts with private individuals were very effective. In a word, forestry-inclined neighbors and community leaders were excellent promoters.

Table 7. *Media influencing owner to seek professional forestry services*

Influence	Owners[1]
	Percent
Forester	16.7
Private individual	20.0
Public employee (non-forester)	10.0
Forest literature	5.0
Demonstrations and meetings	48.3
Total	100.0

[1] Information from 46 respondents representing 6,000 owners.

The limited use of professional foresters is partly related to the cost-consciousness of small owners. One-third of the non-users believe

they lack sufficient land and timber to justify a forester's services (table 8). These owners hold 19 acres of forest on the average and, all things considered, may have grounds for their opinion. Despite the efforts of public and private agencies, one-eighth of the owners are unaware that services are available. All who used free public forestry services intend to do so again.

Table 8. *Owners' reasons for not utilizing professional forestry services*

Reasons	Proportion of owners[1]
	Percent
Feels he does not have enough land or timber	34.6
Not interested in forestry	29.8
Unaware that services are available	11.9
Hadn't thought about it	6.9
Feels familiar with forestry	3.6
Estate cannot agree	2.2
Other	11.0
Total	100.0

[1] Information from 91 respondents representing 41,900 owners.

Agricultural Conservation Program (ACP)

In this region the Agricultural Stabilization Committee will rebate to owners about 75 percent of the costs of planting 20 acres of trees annually, and of carrying out stand-improvement measures on an equal acreage. The landowner may contract the work to recommended crews or do it himself, but it must pass inspection prior to rebate. Although practically all owners are eligible, the program has not been used by those holding less than 30 acres of woodland.

The regional estimate is some 2,800 recipients of ACP forestry payments; of this number 85 percent hold between 30 and 499 acres. Among non-users it is estimated that 16,500, a surprisingly large number, are unaware that payments are available, while 1,500 lack time for the work, and others complain of red tape. Of the estimated 8,400 owners who object to subsidy programs in general, some have made forestry investments solely with their own resources.

Tree planting popular.—Recent decades have seen a steady increase in the rate of planting trees, chiefly loblolly pine. Almost all plantings have been on abandoned fields and pastures. In several counties, landowners have planted over 4 million seedlings in each of the past few years. The Soil Conservation Service (SCS) handles most of the seedlings and resolves planting problems, whether the owners are under ACP or not.

The 105,000 acres of plantings summarized in table 9 include only those made during the present owners' tenure. From 1936 through 1957 government payments for planting in Arkansas were made on 44,000 acres, mostly in the Southwest. It seems obvious that the various inducements inspired owners to plant beyond the allotments of the subsidy programs. Most older plantations have been thinned once and will soon yield additional revenue. Some of the stands were established by the Civilian Conservation Corps.

Table 9. *Occupation class of owners with pine plantations*[1]

Occupation class	Proportion of owners	Proportion of acreage planted
	Percent	Percent
Farmer	25.8	15.5
Business-professional	50.5	53.4
Wage earner-clerical	16.3	13.2
Retired	4.6	12.2
Other (includes corporations)	2.8	5.7
Total	100.0	100.0

[1] Information from 36 respondents representing 3,900 owners and 105 thousand acres of plantations.

Owners are proud of their plantations, new or old. One told of how he was talked into letting "the CCC boys" plant an eroded acre; he now wishes that more land had been planted. One SCS Work Unit Conservationist said, "Get a man to plant his first tree, and he will plant for the rest of his days."

Despite the enthusiasm that planting generates, an increase in the pace may be difficult. Respondents complained about the rationing of seedlings. Production in forest nurseries is rising, but SCS personnel feel that demand for service will exceed the capacity of the present staffs. The interviews disclosed that, in recent years, few owners have personally planted trees. Most hire teams chosen from lists supplied by the SCS or the Agricultural Stabilization Committee. These professional planters are trained by SCS personnel and become highly skilled.

Several respondents remarked that it had taken two or three attempts to establish their plantation. Drought was the most common cause of failure but rabbits and livestock were also destructive. Under the ACP, the land-

owner is not penalized if unavoidable natural hazards destroy his seedlings.

From the interviews it is estimated that over 23,000 owners believe they have no acreage to plant. In this heavily wooded region, practically all owners have sizable areas on which low-value hardwood stands can profitably be replaced with pine. In fact, the unrecognized bulk of the plantable area requires underplanting of pine combined with hardwood control.

TSI favored too.—Between 1936 and 1957, government payments for the control of worthless hardwoods were made on about 88 thousand acres in Arkansas—again chiefly in the Southwest. In practice, TSI covers three distinct operations. First is the deadening of cull timber on both hardwood and pine sites. Second is the deadening of inferior hardwoods to release natural pine seedlings. Third is the removal of the hardwood overstory from areas underplanted to pine. This last practice is just becoming established in the region, and the limited acreage converted so far is included in the planting reported above. All three types of TSI need to be greatly expanded. On most small tracts, the returns per dollar of investment are likely to be greater than those to be had in planting open areas. The size of the need can be inferred from table 10.

Table 10. *Respondents' stands*

Management status	Respondents	Size of average tract	Volume per acre		Basal area per acre	
			Hardwood	Softwood	Cull	Total
	Number	Acres	Cubic feet	Cubic feet	Square feet	Square feet
Pine-site tracts						
Managed	38	238	236	242	11	55
Unmanaged	61	102	239	314	11	64
Hardwood-site tracts						
Managed	12	859	469	134	18	71
Unmanaged	26	135	316	38	14	55

Regardless of management status, the tracts average more than 10 square feet of basal area in cull timber alone. Pine tracts have nearly half their cubic footage in low-value hardwoods. Hardwood tracts are also infested with an over-abundance of low-grade trees. What the survey reveals is a rather primitive level of management, characterized mainly by tree planting on open lands.

TIMBER MARKETING

An effort was made to learn how and under what conditions stumpage is sold. About two-thirds of the owners with recent sales experience appear to have had an adequate idea of their timber's volume and value prior to sale (table 11). The once-prevalent lump-sum sale apparently is being supplanted by cut-product sales, at least where pulpwood is concerned. Pulpwood buying yards are now found in most timbersheds, and many owners sell stumpage merely by stipulating a unit price: volume is then determined by the scalers at these yards.

Pulp company conservation foresters and other private and public foresters marked tracts for some 3,400 landowners. Though 27 percent of the owners who sold wood in the past decade are classed as timber managers, not many have taken steps to control cutting to promote stand growth and development. As can be deduced from table 10, much of the recent cutting has been in the pine component of mixed stands. In such stands confining the cut chiefly to hardwoods would be more beneficial to the owner. On most upland soils in southwest Arkansas, removing hardwoods to favor pine production can increase net returns ten to twenty times.

Table 11. *Timber sales in the past 10 years, by method of sale*[1]

Volume and value	Proportion of owners selling by —	
	Lump sum	Scale of cut products
	Percent	Percent
Known by owner	1.7	63.3
Not known	31.7	3.3
Total	33.4	66.6

[1] Information from 32 respondents representing 6,000 owners.

FOREST INSURANCE, CREDIT, AND TAXATION

Forest insurance.—No forest fire insurance contracts were reported by landowners; the two respondents who had looked into the matter had decided that premiums are too high. Another individual considered his contribution to the State fire-protection fund as insurance. Other respondents, even if they knew that

insurance was available (1), felt it unnecessary. But nearly all are fire-conscious. It is a testimonial to decades of public and private fire-prevention activity that not one respondent said that wildfire benefits the forest.

Before much insurance is written its availability will have to be made widely known and premiums reduced. Considerable loss experience, however, will have to be accumulated before rates can reflect actual costs. Forest credit, if it becomes widely used, may make insurance much more attractive to both lenders and borrowers.

Credit.—Few respondents use their woodlands for collateral, though four had obtained short-term loans at 6 or 7 percent. One man borrows repeatedly on timberland to obtain working capital for his sawmill. Five respondents had been able to obtain timberland loans for non-forestry purposes. Some of these loans had been made in the 1930's. Several others had tried to borrow but had been discouraged by the difficulties.

Respondents who reported difficulties in obtaining loans on timberland probably were referring to the era before 1953. In that year, section 24 of the Federal Reserve Act was amended to authorize national banks to make mortgage loans secured by first liens of forest tracts that are properly managed in all respects. The maximum loan is limited to 40 percent of the appraised value of merchantable timber.

Today Federal Land Banks, commercial banks, and insurance companies also make some loans that take into account the earning possibilities of farm woodlots (3). In addition, loans on timber property may be had from State banks in at least 20 States, Arkansas included. But if an owner wishes to borrow for stand-improvement measures or to acquire more forest property, he must use other collateral.

Taxation.—In speaking about timber taxes, respondents confined themselves to the ad valorem issue. Some said "Too high!" but the consensus is that these taxes are a small price to pay for ownership. Several respondents related taxes to the need for making woodlands yield a return on the investment. They pointed out that they will sell the land if taxes or some other expense pre-empt the yield.

No owners, not even the aged, mentioned inheritance taxes on timberland. Nor was the capital-gains aspect of timber income noted.

In short, there is little or no evidence to support the contention that insurance, credit, and taxation are major problems for Arkansas' small-tract owner. Yet these factors are theoretically important. It would appear that concern with them follows, rather than precedes, investment in timber growing.

LEASING ARRANGEMENTS

Leasing is a promising method for bringing full professional management to small wooded tracts. In many respects the production possibilities of these parcels of timberland are worth more to the wood-using industries and consulting foresters than to their owners. Under formal arrangements, the lessor assumes management of the land and usually pays the owner specified amounts for rental and for timber severed. In informal arrangements, a timber products firm gives professional services to the owners on a fee basis and receives the privilege of first refusal on stumpage. Alternatively, consulting foresters may manage the timber and sell stumpage for the landowner on shares.

Formal and informal leasing arrangements have two things in common: the lessor is under pressure to increase timber production and concomitant returns to the lessee, and the landowner is substantially relieved from making forest-management decisions. The survey found four ownerships with leasing arrangements in force.

It is estimated that 7,000 owners are interested in learning more about leasing arrangements. Most of them have little notion of what to expect. However, one respondent experienced in oil leasing expected one dollar per acre per year. The average holding of interested people is 73 acres, the median 40.

The prevailingly small tracts do not necessarily confront the would-be lessor with insuperable problems. For wood-using firms, leasing may provide greater financial returns than promoting management through alternative programs, such as farm forestry. Too, the outlay of the wood-using industries for locating and acquiring small-tract stumpage could be minimized by leasing.

Conclusions

Southwest Arkansans, like small-tract owners worldwide, have yet to satisfy foresters' desires for timber production. Current stocking is well below economic limits. Yet the acreage in small ownerships remains vital to the region's timber supply.

Some small-owner problems are all-owner problems. In varying degree, all holdings need improved protection from fire, insects, and diseases. All will benefit from widespread markets for little-used species, logging and milling residues, and "cull" trees. Superior strains of hardwood and pine planting stock and improved timber growing and harvesting techniques will be of value to all owners.

Aggregation is taking care of some of the small-tract problem. Between 1949 and 1958, industrial holdings increased from 2.5 to nearly 3 million acres. In the same time span, growing stock on industrial lands rose roughly 200 cubic feet per acre. It now averages 1,150 cubic feet, about double that on small tracts. Within the category of holdings of 5,000 acres or less fractioning and aggregation are likely to continue. The number of owners may stay constant or increase, but the gross acreage in holdings between 500 and 5,000 acres seems certain to rise.

To infer that the small-ownership problem is self-liquidating might be comforting, but would hardly be realistic for those who value time. This study strongly suggests a wide gap between owners' favorable attitudes and their practice.

No single panacea will serve — not even markets for "cull." Increased seedling production, more demonstrations, larger staffs of service foresters, and expansion of incentive payments would be helpful. On many tracts, however, nothing short of full professional management appears likely to succeed. It takes professional judgment to identify acres to be underplanted, areas to be regenerated naturally, trees to be deadened, and stands to be thinned. When the diagnosis has been made, moreover, the prescription will very likely have to be put into effect by someone other than the landowner. For these reasons, forestry agencies will probably stimulate management most by concentrating their efforts on tracts over 99 acres in size.

Leasing is one of the promising approaches for the 7,300 ownerships in excess of 100 acres (2 million acres in all). In a sense, the lessor has a greater financial stake in timber production than the landowner. He is under pressure to make money for the owner while providing raw material for his plant or deriving income from his services. Under lease wood-using industries can frequently manage intermingled and nearby tracts in conjunction with their own, at less cost to the owner than if he attempted to provide his own forestry services.

Consulting foresters can also aid small owners, often by giving more than advice alone. What is frequently needed are individuals or firms able to contract for all management operations from inventory and regeneration to timber harvesting and marketing.

Regardless of the form of lease or contract, it should provide for management continuity against the day the tract becomes an estate.

What are the prospects for small-tract owners in southwest Arkansas? The economic climate is favorable. Trends in land aggregation, per-capita income, and timber prices are all positive. There is also recognition that the region has economic advantages for timber growing. To benefit from these trends will require sustained and heavy investment during the next two decades. Public and private forestry agencies have stimulated good intentions among two-thirds of the area's landowners. Community leaders are confident that a sizable share of these intentions are ready to be converted to practice. Past accomplishments and future prospects suggest that it would be advantageous for the public, forest industries, and consulting foresters to redouble efforts to inspire landowners to invest in timber management.

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Appendix

FOREST SERVICE
U. S. DEPARTMENT OF AGRICULTURE

Budget Bureau No. 40-57176
Approval Expires: 12-31-58

SURVEY OF PRIVATE FOREST LANDOWNERS

1. Name of owner: _____.

2. Mail address of owner: _____.

3. Ownership sample code number: _____.

4. Legal form of ownership (check one): (1) individual ____; (2) partnership ____; (3) corporation ____; (4) estate ____.

5. Occupation of owner (if more than one, indicate priority):

   Operator of wood-using plant ____(specify type: _____);
   Farmer ____ (specify type: _____);
   Other ____ (specify: _____).

6. Area of ownership:

   a. Area of ownership in sampling unit _____ acres.
   b. Area of forest land in sampling unit _____ acres.
   c. Total forest land owned in United States _____ acres.
   d. General location of forest land owned outside the sampling unit _____.

7. How did you acquire title to the forest land in sampling unit?
   (1) Purchase ____; (2) Inheritance ____; (3) Other ____ (specify _____).

8. Number of years in present ownership _____.

9. What is the distance from tract to owner's residence? _____ miles.

10. Age of owner _____ years.

11. Intent of present use of forest land owned in the sampling unit? (if more than one use, number by priority):

(1)	timber growing _____;	(5)	recreation _____;
(2)	timber liquidation _____;	(6)	residence _____;
(3)	clearing land for agriculture _____;	(7)	minerals _____;
		(8)	speculation _____;
(4)	grazing _____;	(9)	other _____ (specify _____).

12. Have you followed any forestry practices on any of your properties?

    (1) none ____; (2) planting ____; (3) timber stand improvement ____;
    (4) regeneration cutting ____; (5) fencing out stock ____;
    (6) prescribed burning ____; (7) plowing fire lines ____;
    (8) other ____ (specify _____).

13. Do you think it would be profitable to invest your money in any of these forestry practices?
    Yes ____; No ____.

    a. IF YES, specify practices _____
    b. IF NO, state reasons _____

14. Have you used a forester on any of your properties?

    (1) none ____; (2) private consulting forester ____; (3) industrial service forester ____;
    (4) State forester ____; (5) SCS forester ____; (6) extension forester ____;
    (7) other ____ (specify _____).

    a. IF ANY USED, who or what influenced you to employ them? (if more than one, indicate priority):

(1) county agent ____; (2) CFM service forester ____;
(3) ASC committee man ____; (4) SCS personnel ____;
(5) neighbor's recommendation ____; (6) public forestry literature ____;
(7) private forestry literature ____; (8) public demonstrations and meetings ____;
(9) private demonstrations and meetings ____; (10) other (specify ____).

b. IF ANY USED, what is your opinion of forestry services provided?

(1) Was service prompt? Yes ____; No ____;
(2) Was cost reasonable? Yes ____; No ____;
(3) Would you use forestry services again if they were free? Yes ____; No ____;
(4) If a nominal charge were made? Yes ____; No ____;
(5) If you would not use foresters again give reasons briefly: ____.

c. IF NOT USED, what was the most important reason for not doing so?

(1) not interested in forestry ____; (2) services sought but not located ____; (3) owner unaware that services were available ____; (4) owner disagreed with forester's advice ____; (5) owner believed he knew forestry principles ____; (6) other ____ (specify ____).

15. Have you obtained ACP forestry payments on any of your properties? Yes ____; No ____.

a. IF YES, what ACP conservation measures were adopted?

(1) tree planting ____; (2) thinning ____; (3) pruning ____; (4) release of desirable trees ____; (5) site preparation for natural seeding ____; (6) fencing ____;
(7) other ____ (specify ____).

b. IF YES, who or what influenced you to obtain ACP payments? (if more than one, indicate priority).

(1) count agent____; (2) CFM service forester ____; (3) ASC committee man ____;
(4) SCS personnel ____; (5) neighbor's recommendation ____; (6) public forestry literature ____; (7) private forestry literature ____; (8) public demonstrations and meetings ____; (9) private demonstrations and meetings ____;
(10) other ____ (specify ____).

c. IF NO, why were payments not obtained?

(1) not available in locality ____; (2) owner not interested in forestry ____; (3) owner unaware that payments were available ____; (4) too much "red tape" involved in making application ____; (5) lack of time to do the work required ____; (6) owner unsympathetic to subsidy programs ____; (7) other ____ (specify: ____).

16. What area have you planted to trees on your properties? ____acres.

a. From what source did you obtain the planting stock? (if more than one indicate priority).

(1) State forester ____; (2) ASC committee (Soil Bank) ____; (3) ACP ____;
(4) SCS ____; (5) forest-industry ____; (6) commercial nursery ____; (7) other ____ (specify: ____).

b. IF YES, who or what influenced you to plant? (if more than one, indicate priority).

(1) county agent ____; (2) CFM service forester ____; (3) ASC committee ____;
(4) SCS area advisor ____; (5) neighbor's recommendation ____; (6) public forestry literature ____; (7) private forestry literature ____; (8) public demonstrations and meetings ____; (9) private demonstrations and meetings ____; (10) other (specify ____).

c. IF NO, what was principal reason for not participating in program?

(1) lack of plantable area ____; (2) owner unaware that assistance was available ____;
(3) terms of program unsatisfactory ____; (4) lack of time to plant ____;
(5) unsympathetic to public aid programs ____; (6) other ____ (specify: ____).

17. Have you tried to borrow funds on the security of any of your forest land and timber?
Yes ____; No ____.

a. IF YES, was credit sought to:

(1) acquire or manage forest property ____;
(2) other (nonforestry) purposes ____.

b. If loan was granted, what were conditions of loan? ____.

c. IF NO, was reason:

(1) credit not needed ____; (2)belief that credit was not available ____;
(3) terms not satisfactory ____; (4) other ____(specify: ____).

18. Have you tried to insure any of your timber stands against forest fire or other hazards?
Yes ____; No ____.

a. IF YES, was insurance desired by a lender in connection with a loan on your timber stand Yes _____; No _____.

b. IF NO, why did you not apply? _____.

19. Have you placed any of your forest properties under long-term lease or other arrangement for forest management? Yes _____; No _____.

a. IF YES, indicate area under lease: _____ acres.

b. IF YES, give name and type of management agency _____.

c. IF NO, would you be interested in having your forest property managed for you by lease or other arrangement? Yes _____; No _____.

(1) If interested, indicate acceptable terms _____.
(2) If not interested, why not _____.

20. Do you lease or rent any of your forest land to farmers under terms where the farmer holds the cutting rights? Yes _____; No _____.

a. If yes, how much forest land do you rent to him? _____ acres.

21. Do the taxes on your forest land and timber materially affect your forest management decisions? Yes _____; No _____.

22. Do you think that uncontrolled wild fires are bad for your timber? Yes _____; No _____; Why? _____.

23. When did you last sell timber? 19_____.

a. Was a written timber-sale agreement used? Yes _____; No _____.

b. Did you have an accurate estimate of volume and value? Yes _____; No _____.

c. What was the basis of payment?

(1) lump sum _____; (2) scale of cut products _____;
(3) other _____ (specify _____).

d. Is home use important? Yes _____; No _____.

24. General description of forest cover in sample tract in sampling unit:

(1) Forest types: _____.
(2) Stand size classes: _____.
(3) Stocking: _____.
(4) Quality of timber: _____.
(5) Average basal area per acre: _____sq. ft.
(6) Estimated average timber value per acre: $ _____.

25. Grazing use of forest area in sampling unit:
(1) Heavy _____; (2) light _____; (3) none _____.

26. Remarks: _____
_____

Recorder: _____

Date: _____